

Cytokine regions susceptible to protease attack identified by structural alignment with Lead mutants

### of IFN $\alpha$ -2b

CDLPQTHSLGSRRTLMLLAQMRRISLFSCLKDRHDFGIPQEEFGNQPKAETIPVLRMIIQKIPNLFSTKDSSAAWDETLLDKFYTELYQQLNDLEACVIQG

VGVTETPLAKEDSILAVERYFORITLVLKEKKYSPCAWEVRAEIMRSFLSNTNUQESLRSKE

REPLICAMENT SHEET  
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Second design nucleic acid molecules  
enable rapid evolution of systems to higher stability, the guidelines are  
Applicants: Reine Gauthier et al., Attorney Designate, No. 17109-012001/02003  
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Exemplary protein of the interferon/interleukin-10 family  
MSYNUFLGFLRSSENFOCQKUJWQNLNGRLREYCLKDRNQFNPPEKEQGQ  
LEKEFDTRGKLASSLHLKRYGRLTYLKAKEYSHCATIVREILRN

Exemplary protein of the short-chain cytokines family  
EPO APPRLICDSRVLERYLLEAKEAENITIGCAEHCSLNENITVPPD

TTLNLAAKKEKISPPDASAPLTTTATFKLPRVYSNFRGKLLYTGAECHEDR  
TPIGPASSLPLSPLKICBQVTRIQQGALQKLVISCATYKICPPELVLGHSLGZPAPLASSCPSQALQGCLSQLHSGPFLTGQLLQALSGRSPELGPFLDTIQ  
IWAQFATTTGCGEFLGPAHAPLQGMPAPASAPBRRAGUUVASHLQFSLFVSYVRLHEAOP



FIG. 9